

SECTION VI REQUIRED IMPROVEMENTS

VI.A. Basic Requirements

The subdivider shall provide all of the improvements required herein and installed at his own expense. All work done under this section shall be done under the direction of the Board, the Town Manager, and the Town Engineer. No aforementioned bond or covenant shall be released until all streets shall have been in place over at least one winter (December 1 to April 15) and full approval in writing of all work done under this section is received from the Town Manager.

In addition to the Town of Amherst Construction Standards, the following minimum specifications shall govern the installation of all roadways, utilities and other improvements in all subdivisions.

VI.B. Clearing and Grubbing of Rights-of-Way

Trees of aesthetic value and over four inches in diameter located at least five (5) feet from the proposed edge of pavement shall require permission of the Board if removal is desired by the developer. All other trees and shrubs shall be removed within the right-of-way as dictated by sound design and landscaping.

VI.C. Drainage

Responsibility for adequate drainage shall rest with the developer. This shall include the risk involved in connecting with existing drainage facilities provided by the Town.

Where property adjacent to the subdivision, but within the same watershed, is not subdivided, provision shall be made for proper projection of the drainage systems by continuing appropriate drains and easements to the exterior boundaries of the subdivision at such size and grade as will allow for such projection. Drainage rights which are appropriate, sufficient, and necessary to handle drainage from the subdivision and adjacent areas shall be secured for the Town.

VI.D. Sanitary Sewers

Sanitary sewer pipes and related equipment, such as manholes, connecting Y's, and lateral's, shall be constructed to serve each building or portion thereof in conformity with the Town Construction Standards as promulgated and amended from time to time. Where, in the opinion of the Board, existing public sewers are not reasonably accessible, a Definitive Plan may be approved without provision of sanitary sewers, provided: a) that no lot shall be built upon without the provision of on-lot sewage disposal facilities specifically approved by the Board of Health in conformity with the regulations of said Board as promulgated and amended

from time to time; and b) that the Planning Board may require installation of so-called “dry sewers,” In conformity with the Town Construction Standards, in any street where, in its estimation sanitary sewers may become accessible within a period of five (5) years.

VI.D. Water

Water pipes and related equipment, such as hydrants and main shut-off valves, shall be constructed to serve each street or portion thereof in a subdivision in conformity with the Town Construction Standards as promulgated and amended from time to time. Where, in the opinion of the Board, existing public water mains are not reasonably accessible, a Definitive Plan may be approved without provision of water lines provided: a) that no lot shall be built upon without the provision of on-lot water facilities specifically approved by the Board of Health in conformity with the regulations of said Board as promulgated and amended from time to time; and b) that the Board may require such special provisions of water for firefighting as are deemed necessary by the Chief of the Fire Department. See Section V.I.1.b.

VI.F. Utilities

All gas, telephone, electricity and cable antenna television lines shall be installed underground. If located within a flood prone area, transformers, switching equipment, or other vital components shall be flood-proofed and approved by the Town Engineer.

VI.G. Road. Berms. and Curb Cuts

Wherever a sidewalk or bicycle path intersects a roadway, curb cuts shall be provided. Roadways, berms, curbs, curb cuts, and shoulders will be constructed in accordance with the Town Construction Standards.

VI.H. Sidewalks and Bicycle Paths

Unless the Board determines that pedestrian movement is otherwise provided for, sidewalks having a width of not less than five (5) feet shall be constructed between the roadway and the right-of-way line, as close to the latter as practicable, and generally parallel with the roadway. Minor streets shall be provided with sidewalks on the one side only, secondary and major streets with sidewalks on both sides. Pedestrian access other than by routes parallel with roadways may be permitted, provided easements are established.

The Planning Board may require bicycle paths from four (4) to eight (8) feet in width within a subdivision. In certain cases the sidewalk requirement may be waived where bicycle paths are provided.

VI.I. Groundwater Drainage

As construction progresses, unforeseen groundwater conditions may be encountered which require additional subdrains or curtain drains. These conditions include potential problems if construction is in progress at a time of low water table or other dry conditions. The Board reserves the right to require appropriate systems to accommodate the problem.

VI.J. Retaining Walls

Retaining walls shall be installed where deemed necessary by the Board and they shall be designed by a Registered Professional Engineer.

VI.K. Fire Alarm Systems

Whenever required by the Fire Department, a fire alarm system shall be installed underground in accordance with the specifications of the Fire Department as promulgated and amended from time to time.

VI.L. Trees and Plantings

1. Existing Trees

Trees on the site, especially those over twelve (12) inches in diameter should be preserved. Following is a list of recommended measures for the protection of trees:

- a. There should be no operation of heavy equipment or storage of any materials under said tree within its natural drip line.
- b. Wherever possible no grading or filling should be done within the drip line.
- c. Supplemental irrigation should be provided to all trees as needed during the summer months to insure healthy maintenance.
- d. No black top paving or vehicle parking should be located under evergreen trees. No more than twenty (20) per cent of the area under any deciduous trees natural drip line may be so paved.
- e. All drainage from paved areas should be directed away from root zones.

2. Street trees

- a. The subdivider is required to plant suitable broadleaved deciduous shade trees along roads, or ways unless specifically exempted by the Board. All

trees shall be the equivalent of well-rooted nursery-grown stock; free of injury, harmful insects, and diseases. They shall be well-branched, and the branching structure should be sound.

- b. Acceptable types of street trees may be selected from a list in the Planning Board office in the Town Hall, which includes large-growing, medium-growing, and small-growing deciduous trees.
- c. Large growing trees shall be spaced at intervals of 45 to 55 feet, medium-growing trees at intervals of 30 to 40 feet, and small-growing trees at intervals of 20 to 30 feet. Trees on one side of the street may be set either opposite or diagonally to trees on the opposite side. If overhead wires are present, large or medium-growing trees to be planted along the same side as such wires should be planted within the set-back area of the property rather than adjacent to the paved way. Small-growing trees with low-branching characteristics should be planted within the front yard set-back area in all cases.
- d. Minimum acceptable sizes of trees to be planted shall be as follows:

Large-growing	2 1/2" trunk diameter, caliper at 1' above ground
Medium-growing	2 1/2" trunk diameter, caliper at 1' above ground
Small-growing	9' crown height, 5' spread
- e. Planting operations shall be as specified in Section 8, Subsections A, C, E, and F', of the Recommended Standard Specifications for Planting Trees, Shrubs, and Vines--Associated Landscape Contractors of Massachusetts.
- f. Requirements for support stakes, guy wire and cable, ground anchors, hose, and wrapping material shall be those contained in Section 6 of the Recommended Standard Specifications for Planting Trees, Shrubs, and Vines, compiled and issued by the Associated Landscape Contractors of Massachusetts, Inc.
- g. The subdivider shall be responsible for maintenance of planted trees and replacement of those which have died or become diseased from the time of planting through one full growing season.

3. Bank Plantings

- a. All cut or fill bankings that tend to wash or erode must be planted with suitable, well-rooted, low-growing plantings. All plants shall be the equivalent of nursery-grown stock in good health, free from injury, harmful insects, and diseases.

- b. Acceptable planting types may be selected from a list in the Planning Board office in the Town Hall, which includes very low-growing (4" to 12"), low-growing (12" to 30") and herbaceous plantings. Perennial grass turf installed as sod is an acceptable alternative for the planting of banks.
- c. If bank plantings are of a type which are properly spaced at close intervals, 8" to 12" of loam shall be spread over the entire bank. If the plantings are to be widely spaced they may be planted in loam pits.
- d. Mulch (wood chips or equal) shall be spread heavily among plantings for weed and erosion control.
- e. The subdivider shall be responsible for maintenance of bank plantings and replacement of those which have died or become diseased from the time of planting through one full growing season.

4. Corner Plantings

Requirements for plantings adjacent to street intersections shall be the same as those for Bank Plantings with the following exceptions:

- a. Turf may be provided by seeding as well as by planting sod.
- b. Bushy shrubs and herbaceous plantings that would tend to obscure visibility are not permitted within one hundred feet of the intersection of the curbs adjacent to the corner lot.

5. Cul-de-sac Plantings

The central portion of a permanent dead-end street should be landscaped. The following options are permitted:

- a. Planting with ground cover such as those listed in Section VI.L.3.b. using and 8" to 12" base of loam, and spreading mulch between plants for weed control.
- b. Planting perennial grass by either sod or seed.
- c. Planting ornamental shrubs of a type acceptable to the Board.
- d. Retaining existing vegetation, with the approval of the Board.
- e. Standards and Specifications
The standards of the American Nurserymen Association and the specifications of the Associated Landscape Contractors of Massachusetts shall apply to landscaping subject to these regulations.

6. Grass Strips

All cleared areas of a right-of-way, not to be planted with groundcover plantings, including all disturbed area over all culverts in drainage easements, shall be loamed with not less than six (6) inches compacted depth of good quality loam, seeded with lawn grass seed. Seeding shall be done at appropriate times of the year and in a manner to insure growth of grass. No utility poles, transformers, signs or similar items shall be placed within the grass plot within three feet of the edge of the pavement.

VI.M. Street Signs

Street name signs of a design conforming to the type in general use in the Town shall be furnished, set in concrete and erected at all street intersections prior to the occupancy of any house on the street. Signs may be purchased from the Town of Amherst Public Works Department.

VI.N. Street Lights

Installation of street lights shall be governed by current town practice.

VI.O. Guard Rails

Guard rails shall be installed as required by the Board.

VI.P. Bounds and Lot Corners

Bounds shall be set on both sides of each proposed street at all angle points, at the beginning and end of all curves thereof, and at all intersections of streets and ways with each other or with Plan boundary lines. The bounds shall be of stone or reinforced concrete, shall be not less than four (4) feet in length and not less than six (6) inches in width and breadth and shall have a drill hole in the center. All bounds shall be set flush with the surface of the adjoining ground. Wrought iron rods may be used where the points fall on exposed ledge. The placement and accurate location of these bounds shall be certified to by the Registered Land Surveyor of the developer by a letter which shall be submitted with the As-Built Plan. Entrances to subdivisions shall not be marked by elaborate monuments.

Lot corners in the subdivision shall be set in a manner similar to the setting of the Bounds. These corners or points of deflection will be marked with iron pins (or equal) as permanent markers. The same certification is required as in the case of the bounds. Use of the Massachusetts Coordinate System is encouraged.

VI.Q. As-Built Plan

After all street construction is completed, two copies of the Definitive Plan, revised into an As-Built Plan, showing centerline elevation at fifty (50) foot intervals of roads as built, all inverts of drainage system and sewerage as installed, all utilities as installed, and bounds as installed shall be furnished to the Board prior to the release of the Performance Bond.

VI.R. Final Cleaning

Upon completion of the work, the subdivider shall remove from the highway and adjoining property all temporary structures, surplus of the work; and shall leave the subdivision area in a neat and orderly condition. Burning of the rubbish and waste material is prohibited.

VI.S. Inspections of Improvements

Inspections during the work shall be arranged with the Town Engineer prior to starting construction, who will provide the subdivider with a checklist covering these inspections. The Town Engineer or his designee will sign this checklist after satisfactory completion of each step by the developer. Inspections shall be requested at least 48 hours in advance of each inspection by notice to the Town Engineer. Inspections shall be made after each step indicated above. All weight slips for bituminous material shall be furnished to the town Engineer on request (See Form L).